

Landscape Maintenance & Management Plan

Proposed McDonalds Restaurant

at

Owl Lane / Shaw Cross
Dewsbury

FOR PLANNING

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INTRODUCTION

The purpose of this document is to aid the efficient and effective long-term management of the proposed landscaping following construction and provide the framework and necessary detail to guide operations relating to the maintenance of the landscape. This report schedules the maintenance activities required to ensure successful establishment and long-term success of the proposed site landscaping.

The document outlines the objectives, management responsibilities and maintenance schedules for all elements of the landscape and should be read in conjunction with the landscape plan (Vector drawing reference **16716-VL-MCDS_L01 & V16716-VL-MCDS_L02**), which illustrates the landscape areas covered within this management plan.

The maintenance of the landscape will be the responsibility of the building operator and should be carried out in accordance with this document using the maintenance schedule as guidance to ensure all necessary procedures are followed.

It is important to emphasise that the Building operator will be responsible for the ongoing maintenance of the site for the **lifetime of the Development**. Once the initial 5-year establishment period is complete the landscaping will be subject to a detailed inspection, this document reviewed and updated accordingly to cover the specific requirements for the next period. The post 5-year establishment strategy as outlined within this document should be followed.

DESIGN & MAINTENANCE OBJECTIVES

The proposed landscape scheme has been developed to create a pleasant landscape setting which will complement the proposed Architecture and maximise the effective integration of the built form within the surrounding environment. (Refer to Vector Landscape plan **V16716-VL-MCDS_L01 and V16716-VL-MCDS_L02** for landscape proposals).

The soft landscaping will consist of close mown grassed areas, tree and ornamental shrub planting and formal clipped hedges used reinforce the proposed site layout and define boundaries. Planting will have an element of all year-round interest and be easy to maintain to ensure the longevity of the scheme. Close mown grass areas around the proposed restaurant unit and drive thru lane have been incorporated to maintain visibility to all areas and to deter rodents from the site.

Trees and specimen shrubs have been proposed to create a well-structured landscape with height and provide an element of maturity from initial installation. A Tree is proposed within planting along the North East Corner to provide screening and visual interest. It will be important to ensure that all existing and proposed trees are routinely inspected and the appropriate maintenance operations are carried out as the landscape establishes to prevent excessive overhang and shading to the car parking, access roads and surrounding main roads and pavements.

The general planting design is to be formal in character with Shrub planting specifically proposed within the North East corner to improve wildlife and biodiversity. Three planters for pollinators proposed along the drive thru will further improve the ecology value within the site. Species have been chosen based on their suitability to the site, resilience, performance and seasonal interest. Furthermore, dwarf formal hedge planting frames an area of specimen shrub planting at the beginning of the drive-thru with formal hedge planting proposed along key points along the north east and south boundary. All these areas will require routine inspection and maintenance as the planting establishes to ensure it remains attractive and achieves the long-term desired effect. Routine maintenance including selective pruning and management as part of the maintenance works will prevent these areas from becoming overgrown and unkempt.

Three large existing rocks are to be incorporated within a planting bed to create a feature area including dwarf hedging and specimen shrub planting. The area replicates the use of rocks/boulders used around the site such as Leeds Road and the roundabout on the B6128.

The grass border is proposed on all boundaries of the site to reflect the existing off-site grassland areas and will be subject to a strict mowing regime to prevent them from becoming overgrown and unkempt.

5 YEAR LANDSCAPE ESTABLISHMENT PERIOD: MAINTENANCE SCHEDULE

The maintenance schedule below sets out the maintenance tasks, frequency, timing and year from implementation which they should be carried out. The amount of work required may not be finished in these initial 5 years, a schedule has been put in place to cover ongoing maintenance post the initial 5-year establishment period outlined below.

The schedule should be used as a guide for maintenance tasks and should be flexible if necessary.

To be read in conjunction with Vector Landscape Plan drawing ref **16716-VL-MCDS_L01 & V16716-VL-MCDS_L02**:

Item	Action	Year					Frequency	Timing*
		1	2	3	4	5		
Litter & Debris removal	<ul style="list-style-type: none"> Pick all litter from areas of hard and soft landscape and remove from site. 	■	■	■	■	■	Weekly	All Year round
Leaf Fall	<ul style="list-style-type: none"> Sweep up leaf fall under trees and windblown in formal and hard landscape areas. 	■	■	■	■	■	Weekly – Adjust frequency to reflect leaf fall at different times of year or in spells of windy or frosty weather.	All Year round
Existing trees	<ul style="list-style-type: none"> Carry out inspection for general health. Cut back broken/diseased branches. Prune to promote highest standard of growth & form. Thin branches out as required to ensure the tree does not become unkempt and overgrown. 	■	■	■	■	■	Twice a year	Mar & Oct
Ornamental Shrub Pruning	<p><u>Hebe Mrs Winder'</u></p> <ul style="list-style-type: none"> Prune when required mid to late spring to maintain a neat and tidy appearance and plant habit (RHS pruning group 9) 			■	■	■	Annually or as required	Mid – late Spring
Ornamental Grass pruning	<p>Perennial: <u>Stipa tenuissima</u></p> <ul style="list-style-type: none"> Remove any loose old leaves and seed heads in April/May. If they begin to appear messy, cut back in late spring early summer. 	■	■	■	■	■	Annually & as required	Spring & early Summer
Raised Planter Shrub Planting	Prune all shrubs to maintain a neat and tidy appearance in accordance with individual species pruning requirements.			■	■	■	Annually or as required	Autumn & Spring

	<ul style="list-style-type: none"> Prune to remove any damaged shoots or branches. Prune to remove all suckers. 	■	■	■	■	■	As required	All Year round
	Prune winter flowering shrubs.			■	■	■	Annually or as required	Spring
	Prune shrubs which flower between period Mar – Jul.			■	■	■	Annually or as required	Immediately after flowering
	<ul style="list-style-type: none"> Inspect all planting for dead or damaged plants. Replace all dead / dying / vandalised shrubs with the same species and size as soon as possible. 	■	■	■	■	■	Annually or as required	Nov
	<ul style="list-style-type: none"> Remove weeds within planters by hand weeding where appropriate. Inspect irrigation pipe to check level of water. Water using irrigation pipe if required. 	■	■	■	■	■	Monthly as required	All Year round
Mulch Levels to ornamental planting areas	<ul style="list-style-type: none"> Maintain full depth of mulch to planting areas by topping up / renewing mulch material to a depth of 75mm. 	■	■	■	■	■	Monthly as required	All Year round
Irrigation	<ul style="list-style-type: none"> Water ornamental shrub planting areas and trees to full depth of topsoil. Inspect soil conditions to determine when watering is required. 	■	■				Immediately after planting then as required until planting is established.	All Year round
Weed Control to shrub planting beds	<ul style="list-style-type: none"> Remove weeds within planting beds by hand weeding where appropriate. 	■	■	■	■	■	Monthly	Apr - Oct
	<ul style="list-style-type: none"> Suppress weeds with the application of a non-residual herbicide. Rate and application as per manufacturer's specification. 	■	■	■	■	■	3 No. applications per year whilst weeds are actively growing.	Apr, July & Oct
Fertiliser to Planting Areas	<ul style="list-style-type: none"> Apply slow release fertiliser to planting beds. Rate and application to manufacturer's specification. 		■		■		Annually	Mar - Apr
Shrub Replacements	<p>Note: <i>Any trees and shrubs which, within a period of 5 years of being planted die, are removed or become seriously damaged or Diseased shall be replaced in the next planting season (October-March inclusive) with replacement plants of the similar and species as originally approved,</i></p>							
	<ul style="list-style-type: none"> Inspect all planting areas for dead or damaged plants. Replace all dead / dying / vandalised 	■	■	■	■	■		Annually or as required

	shrubs with the same species and size as soon as possible.							
Specimen Shrubs	<u>Amelanchier-lamarckii</u> <ul style="list-style-type: none"> Should need little pruning but if required light prune in late winter or early spring Prune to remove any damaged shoots or branches. (RHS pruning group 9) 	■	■	■	■	■	Annually or as required	Late Winter or early Spring
	<u>Buxus sempervirens 'Sphere'</u> <ul style="list-style-type: none"> Trim three times a year, one in late spring, midsummer and a final shaping in early autumn. 	■	■	■	■	■	Three times a year or as required	Late Spring, midsummer and Early Autumn
	<u>Phormiums</u> <ul style="list-style-type: none"> Prune to remove any damaged shoots or branches. 	■	■	■	■	■	Annually or as required	Oct - March
Specimen Trees - Standards	<ul style="list-style-type: none"> Carryout inspection for general health Cut back broken/diseased branches Prune to remove branches to give a min clear stem height of 2m above footpaths. Replace / re-secure loose or missing guy wires if required. Adjust to suit stem growth and provide correct and uniform tension Re-firm ground around base if required. 	■	■	■			Twice a year	Mar & Oct
	<ul style="list-style-type: none"> Carryout inspection for general health Cut back broken/diseased branches Prune to promote highest standard of growth & Form. 				■	■	Twice a year	Mar & Oct
Tree Replacements	<ul style="list-style-type: none"> Inspect for dead or severely damaged trees at the end of the growing season. Replace all dead / severely damaged / vandalised trees with same size, species and maturity as that originally planted. 	■	■	■	■	■	Annually	Nov
Grass mown grass areas	<ul style="list-style-type: none"> First cut of the season of 60mm, then cut to maintain a sward height of 40mm Grass height should not exceed 100mm at any time. 	■	■	■	■	■	As Required - adjust according to growth rate and weather conditions.	Apr - Oct

	<ul style="list-style-type: none"> Edges of amenity grass areas adjacent to fences, walls, kerbs, paths, trees and other boundaries or obstacles shall be trimmed using edging shears/trimmer. 	■	■	■	■	■	As Required - adjust according to growth rate and weather conditions.	Apr - Oct
	<ul style="list-style-type: none"> Control/Remove Weeds through application of selective herbicide 	■	■	■	■	■	Twice a year	Apr & Aug
	<ul style="list-style-type: none"> Remedial works - repair worn areas / top dress hollows. 	■	■	■	■	■	Twice a year	Apr & Aug
Formal Hedge planting	<ul style="list-style-type: none"> <u>Buxus sempervirens (dwarf hedging unit)</u> Prune twice a year in mid-June and September/October 	■	■	■	■	■	Annually	Summer & Autumn
	<ul style="list-style-type: none"> <u>Fagus sylvatica (Hedging unit)</u> Maintenance pruning to maintain maximum 1.2 metre hedge height and clear stem of 150-200mm above ground. Trim in August (late summer) 	■	■	■	■	■	Annually	Late Summer

POST 5 YEAR ESTABLISHMENT PERIOD: MAINTENANCE SCHEDULE

The sites landscape areas will continue to be maintained post the 5 year initial establishment period under an ongoing landscape maintenance contract with the maintenance operations and frequency required adjusted accordingly as the planting becomes established and trees reach maturity.

In order to ensure successful management of the site, the landscape maintenance requirements will be reviewed annually at the end of October so that replacements, priorities and prescriptions can be modified and implemented for the forth coming planting season.

The following schedule outlines the long-term maintenance operations required. Implementation of these will ensure the site is maintained to a high standard for the future lifetime at the development. The schedule should be used as a guide for maintenance tasks and should be flexible if necessary.

Item	Action	Frequency	Timing*
Litter & Debris removal	<ul style="list-style-type: none"> Pick all litter from areas of hard and soft landscape and remove from site. 	Weekly	All Year round
Leaf Fall	<ul style="list-style-type: none"> Sweep up leaf fall under trees and windblown in formal and hard landscape areas. 	Weekly – Adjust frequency to reflect leaf fall at different times of year or in spells of windy or frosty weather.	All Year round
Raised planter – Bamboo planting	<ul style="list-style-type: none"> Prune maintain a neat and tidy appearance in accordance with species pruning requirements as stated within the 5 year schedule. 	Annually or as required	All Year round
Ornamental Shrub Pruning	<ul style="list-style-type: none"> Prune all shrubs to maintain a neat and tidy appearance in accordance with individual species pruning requirements as stated within the 5 year schedule. 	Annually or as required	Spring
	<ul style="list-style-type: none"> Prune to remove any damaged shoots or branches. Prune to remove all suckers 	As required	All Year round
Ornamental grass pruning	<ul style="list-style-type: none"> Prune all grasses to maintain a neat and tidy appearance in accordance with individual species pruning requirements as stated within the 5 year schedule. 	Annually or as required	All Year round
Mulch Levels to ornamental planting areas	<ul style="list-style-type: none"> Maintain full depth of mulch to planting areas by topping up / renewing mulch material to a depth of 75mm. 	Annually if required.	Spring
Weed Control to shrub planting beds	<ul style="list-style-type: none"> Remove weeds within planting beds by hand weeding where appropriate. 	Monthly	Apr - Oct
	<ul style="list-style-type: none"> Suppress weeds with the application of a non-residual herbicide. Rate and application as per manufacturer's specification. 	3 No. applications per year whilst weeds are actively growing.	Apr, July & Oct

Shrub Replacements	<ul style="list-style-type: none"> Inspect all planting areas for dead or damaged plants. Replace all dead / dying / vandalised shrubs with the same species and size as soon as possible and no later than the first available planting season. Plant new species in the same location. 	Annually or as required	Nov
Specimen Trees- Standards	<ul style="list-style-type: none"> Carryout inspection for general health Cut back broken/diseased branches Prune to remove branches to give a min clear stem height of 2m above footpaths. Replace / re-secure loose or missing guy wires if required. Adjust to suit stem growth and provide correct and uniform tension. Re-firm ground around base if required. 	Twice a year	Mar & Oct
	<ul style="list-style-type: none"> Carryout inspection for general health Cut back broken/diseased branches Prune to promote highest standard of growth & Form. 	Twice a year	Mar & Oct
Tree Replacements	<ul style="list-style-type: none"> Inspect for dead or severely damaged trees at the end of the growing season. Replace all dead / severely damaged / vandalised trees with same size, species and maturity as that originally planted in the same location as soon as possible. 	Annually	Nov
Close mown grass areas	<ul style="list-style-type: none"> Cut to maintain a sward height of 40mm Control/Remove Weeds through application of selective herbicide Remedial works - repair worn areas / top dress hollows. 	As Required	Apr - Oct
		Twice a year	Apr & Aug
Formal Hedge	<ul style="list-style-type: none"> Prune maintain a neat and tidy appearance in accordance with species pruning requirements as stated within the 5 year schedule. 	Annually	Summer & Autumn

Note: Works that may affect habitats suitable for use by nesting birds will only be carried out between September and February inclusive (outside of breeding bird season) unless it is appropriately demonstrated that no active bird nests are present.

LANDSCAPE WORKS & MAINTENANCE SPECIFICATION

To be read in conjunction with Vector Landscape Plan drawing ref **16716-VL-MCD_L01/ V16716-VL-MCDS_L02**:

To ensure the success of tree and shrub planting, the landscape workmanship should adhere to the following:

- BS 3998 1989: Recommendations for tree work
- BS 4043 1989: Recommendations for transporting root balled trees
- BS 4428 1989: Code of practice for general Landscape Operations
- BS 7370 1993: Part 4, Grounds maintenance recommendations
- BS 3882 2015: Topsoil

Ornamental Planting/ Planter planting

All shrubs to be planted in accordance with the planting specification stated on the landscape plan and shall be defined and described in British Standard Specification No 3936 1992: Nursery Stock part 1 – Specification for Trees and Shrubs. All Shrubs to be true to name, vigorous, well grown specimens of their type, free from disease and insect pest.

Maintenance should be implemented for a minimum of five years until the planting stands independently, is dominating surrounding vegetation and producing reasonable growth every year.

Shrub planting to be mulched and kept free of weeds and debris, watering is also paramount to ensure establishment. Watering should be carried out daily during periods of dry weather.

Shrubs to be pruned in accordance with British Standard 7370: Part 4, 1993: 3.6 and only by operatives knowledgeable and aware of the varieties of plant being treated and the reasons for pruning.

Setting Out and Planting Instructions

The landscape contractor shall carry out all planting in accordance with the landscape plan. All trees shall be planted in the positions and in numbers indicated on the drawing.

Standards of workmanship and materials used for planting and staking shall be as outlined in British Standard Specification No 4428 1989: Code of Practice for General Landscape Operations, Section 7 – Amenity tree planting, Section 8 – Woodland Planting, Section 9 – Planting of Shrubs, Herbaceous plants and bulbs.

The roots of all bare root shrubs and transplants are to be treated with alginure root dip prior to planting, using a mixture of, one part alginure to three parts water.

Timing of Planting

Planting of field grown plants should not commence before the 1 October and no later than the 31 March and shall also be suspended during periods of severe frost and where plant locations are waterlogged.

Establishment of New Planting

The soil in beds should be kept loose with gentle cambers and no hollows. Mulch depth should not be reduced however. Trees crowns should be sprayed when in leaf in the evening during warm weather.

Re-firming of Trees and Shrubs

Ground should be re-firmed around the base of plants by treading until they are firmly bedded after strong winds, frost heave and other disturbances. Any collars in soil at the base of tree stems, created by tree movement should be broken up by fork and backfilled with topsoil and re-firmed whilst avoiding damage to roots.

Tree Pruning

Excessive overhang of any growth encroaching onto paths, roads, signs, sightlines and road lighting luminaries should be carried out as required. All pruning operations should suit the type and timing of the plant species. No pruning should take place during the late winter / early spring sap flow period. Young trees up to 4 metres should be crown pruned by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader. Duplicated branches and potentially weak or tight forks should be removed by cutting back to live wood. Whips should not be pruned.

All pruning works should be carried out by an approved member of the Arboricultural Association or other approved specialist using approved methods.

Pruning Ornamental Shrubs

Shrubs should be pruned to encourage healthy and bushy growth and desirable ornamental features. All suckers should be removed by cutting back level with the source stem or root. Timing as follows: Winter flowering shrubs in Spring. Shrubs flowering between March and July immediately after flowering period. Shrubs flowering between July and October should be cut back to old wood in winter. No pruning or trimming of woody vegetation and climbers to be carried out during the bird nesting season of March to August.

Clipping Hedges

Beech hedging is to be pruned in late summer to maintain a maximum height of 1.2m high and have a clear stem of 150-200mm above ground, Lavender is to be pruned in late summer to maintain a neat and tidy appearance and Buxus box hedging is to be pruned twice a year in Summer and Autumn.

Replace dead, dying or damaged stock with the same species as soon as practicable in the first planting season following failure.

Shrub Planting Replacement

Planting that has failed to show growth or development of full foliage during the first growing season after planting, should be replaced by the landscape contractor within the following planting season. All such replacement planting shall be at the landscape contractor's expense, who shall also be responsible for any preparatory and other work necessary to be properly carried out, including the removal and disposal of dead plant material. The replacement planting and pits should match the size of adjacent or nearby plants of same species or match original specification, whichever is greater. Reapply slow release fertilizer after new planting installed.

Fertilizer

Fertilize with Miracle Professional 'Enmag' or equal approved in March or April by spreading evenly throughout bed at the manufacturers recommended rate per m². Carefully lift and replace any mulch materials.

Weed Control & Mulching

Keep planting beds clear of weeds by use of suitable herbicides and maintaining full thickness of mulch (to be 75mm thick Melcourt Amenity bark mulch by Melcourt Industries Ltd or equal approved). Mulch top ups should take place on a regular basis as required to ensure the 75mm thickness is retained at all times and should continue until close cover of vegetation is achieved. A weed free area should be maintained around each tree and shrub to a minimum diameter the larger of 1 metre or the surface of the original planting pit. Weed control should be carried out monthly from April to September for ornamental shrub planting through the use of translocated herbicide treatments to manufacturer's instructions. All dead plant material should be removed from site once herbicide treatment has taken effect without damaging adjacent plants, trees and grass.

Watering

All planting to be subject to a watering regime with trees watered in accordance with BS8545 2014 Trees from Nursery to Independence. This is absolutely essential to ensure the continued success of the scheme, particularly in the key first 12 to 18 month establishment period. The frequency should be as necessary to ensure the continued thriving of all planting. During dry periods minimum weekly visits should be made to site to ensure the soil is not too dry and to water if necessary. The soil should be checked for dryness using either a soil moisture sensor or pushing

a spade into the top 300mm of soil and seeing how the soil looks. If it is moist there is no need to water but if it is bone dry then water immediately. Supply should be from potable mains water or an approved alternative. The full depth of topsoil should be wet without loosening or damaging plants. Any compacted soil should be loosened or scooped out to direct water to the rootzone. Trees should be watered via their irrigation pipes, in accordance with the manufacturer's instructions, to ensure the water reaches the rootball of the tree.

Grass Seeding

Grass seeding shall be carried out in accordance with British Standard 4428, 1989 – Code of practice for General Landscape Operations; Section 5.3. No seeding shall take place until preparatory work has been undertaken and approved. The finished topsoil level should be 25mm above adjoining paths, kerbs and man holes. Sowing of the seed should commence in fine weather conditions and should be sowed at the rate/m² specified in British Standard 4428, 1989 – Code of Practice for General Landscape Operations; Section 5.3.

Grass Mowing

Prior to cutting, grass areas are to be inspected and all litter / debris is to be removed in accordance with the procedures described in the general site cleanliness section below.

All mowing operations are to be carried out by suitably trained personnel using well maintained machinery appropriate to the task, cylinder, rotary or mulch mowers and only when weather and ground conditions are suitable. Operations shall be suspended where ground conditions prevent the use of machine without damage to the ground surface. Where operations are suspended additional maintenance visits may be required in order to maintain the sward within acceptable growth limits.

The frequency of cutting may vary slightly in response to growth rates and weather conditions and should be assessed with the maintenance schedule adjusted as necessary. As a general rule, cutting is likely to be required every two weeks on high maintenance areas, ensuring that the sward height does not exceed 100mm and that the presence of flowering weed species is avoided.

The height of growth must not exceed 100mm at any time. The first cut of the year should be to a height of 60mm then the grass maintained and cut to a height of 40mm.

All cuttings are to be collected and removed from site by the contractor. Following cutting, all grass clippings shall be swept from adjacent hard landscape areas and removed from site to an authorised disposal facility (preferably recycling).

Edges of amenity grass areas adjacent to fences, walls, kerbs, paths, trees and other boundaries or obstacles shall be cut using equipment suitable to the task. Strimmers shall not be used around the base of trees.

The sward shall be kept substantially free of broad leaved weeds by the use of a suitable selective herbicide applied twice a year in strict accordance with the manufacturer's instructions.

Any hollows which appear within the amenity grass areas due to settlement or other causes, which are hazardous, shall be top dressed in early spring with topsoil and seeded with a grass mix to the original proposed specification. Grass seeding shall be carried out in accordance with

British Standard 4428, 1989 – Code of practice for General Landscape Operations; Section 5.3. No seeding shall take place until preparatory work has been undertaken and approved. The finished topsoil level should be 25mm above adjoining paths, kerbs and man hole covers. The sowing of the seed should commence in fine weather conditions and should be sown at the rate per m² as in the original landscape proposals.

Site Cleanliness

The site area shall be kept clean and free of litter and dog fouling in accordance with the Department for Environment, Food & Rural Affairs PART1; Code of Practice on Litter and Refuse issued under section 89 of the Environment Protection Act 1990.

The site shall attain grade A standard at least once every day and not be allowed to fall below grade B at any time.



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